

REPORT

OF THE

Bristol Mental Hospitals

1948 to 1951

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**BRISTOL MENTAL HOSPITALS GROUP
MANAGEMENT COMMITTEE**

at 31st December 1951.

Chairman :

Alderman A. W. S. BURGESS, C.B.E., M.A., J.P.

Vice-Chairman :

W. DANCY, Esq.

Members :-

Mrs. CYRIL CLARKE, J.P.

Mrs. A. D. FIELD, J.P.

J. HUTTON, Esq., M.D., D.P.H.

A. H. JENKINS, Esq.

Miss EDITH KEEN, O.B.E.

P. J. M. LYONS, Esq.

W. NICHOLLS, Esq., M.B.E., J.P.

J. E. G. PEARSON, Esq., M.A., D.M., F.R.C.P.

T. WALKER, Esq.

Miss G. M. WILLIAMS.

MEDICAL AND TECHNICAL STAFF

at 31st December 1951.

Consultant Psychiatric Physicians.

R. E. HEMPHILL, M.A., M.D., D.P.M.

(Medical Superintendent, Bristol Mental Hospitals ;
Consulting Psychiatric Physician, United Bristol Hospitals ;
Lecturer in Charge Department of Psychiatry, University of
Bristol ;
Member of South Western Regional Hospital Board).

D. F. EARLY, L.R.C.P. & S.I., D.P.H., D.P.M.

(Physician in Charge, Fishponds Hospital).

A. LEITCH, M.D., D.P.M. (Barrow)

S. SMITH, M.D., M.R.C.P., D.P.M. (Barrow)

E. C. TURTON, M.A., M.Sc., M.R.C.P., D.P.M.

(In Charge Department of Electroencephalography, Barrow).

Consultant Physician.

In Charge Department of Endocrinological and Biochemical Research :

M. REISS, M.D., D.Sc. (Prague), D.Sc. (Bristol).

Psychiatric Physicians (SHMO)

G. M. GIBB, M.B., CH.B., D.P.M. (Barrow)

P. G. GRANT, M.B., CH.B., D.P.H. (Fishponds)

E. H. HARE, M.A., M.D., D.P.M. (Barrow)

R. MAGGS, M.B., CH.B., D.P.M. (Barrow)

(One vacancy)

Assistant Psychiatric Physicians (JHMO)

J. ORME, M.R.C.S., L.R.C.P. (Barrow)

S. PRUS, MED. DIP. (LWOW) (Fishponds)

Senior Registrars.

B. V. EARLE, M.D., M.R.C.P.

(One vacancy)

Registrars.

K. W. ARON, M.B., CH.B., D.P.M.

L. W. BOWEN, M.B., CH.B.

B. EDGAR, M.B., CH.B.

A. FRENCH, M.B., CH.B.

H. KAUFMAN, B.A., M.R.C.S., L.R.C.P.

C. MILNE, M.B., CH.B.

Department of Experimental and Applied Psychology.

K. R. L. HALL, M.A., PH.D. (Senior Psychologist in Charge of Department)
T. CROOKES, M.A., B.SC.
A. E. EARLE, B.A.
*Mrs. E. STRIDE, B.SC.

Department of Electroencephalography.

E. C. TURTON, M.A., M.SC., M.R.C.P., D.P.M.
(Consultant Psychiatric Physician in Charge).
M. G. T. HEWLETT (Electronic Engineer).
A. SPEAR (Recordist)
J. ROCKETT (Recordist).

Department of Biochemical and Endocrinological Research.

M. REISS, M.D., D.SC. (Consultant Physician in Charge).	
J. J. GORDON, PH.D.	L. BRYANT
C. P. HAIGH, B.SC., PH.D., A.INST.P.	C. CHEN
I. D. K. HALKERSTON, B.SC.	MARY FELDMAN
E. R. COOK, A.R.I.C;	M. FORD
MARGARET ROOKS, B.SC.	A. E. HALL
R. S. STITCH, B.SC.	A. F. HOBBS
CONNIE PLAICE, B.SC.	JEAN HOBDEN
R. BRIMBLECOMBE, B.SC.	AUDREY HORSEMAN
JEAN ASHMEAD	GRACE PADDOCK
F. BADRICK	D. PALMER
M. BARKER	*JANET PELLY
Mrs. V. M. BARTLEY	Mrs. J. REISS
SYLVIA BIGGS	*R. SHIPTON
BARBARA BINHAM	M. TREBLE
EVA BRUMMEL	*G. WALDEN

* Working under a Research Grant.

Visiting Medical and Dental Staff

<i>Medicine</i>	...	...	...	J. M. NAISH, M.A., M.D., M.R.C.P.
<i>Surgery</i>	...	...	...	D. G. C. TASKER, B.SC., M.S., F.R.C.S.
<i>Neuro-Surgery</i>	...	...	...	G. L. ALEXANDER, B.SC., F.R.C.S.
<i>Thoracic Surgery</i>	...	...	...	R. H. R. BELSEY, M.S., F.R.C.S.
<i>Ear, Nose and Throat</i>	...	...	...	G. R. SCARFF, F.R.C.S.
<i>Neurology</i>	...	...	...	A. M. G. CAMPBELL, M.A., D.M., F.R.C.P.
<i>Tuberculosis</i>	...	...	...	J. E. G. PEARSON, M.A., D.M., F.R.C.P.
<i>Gynaecology</i>	...	...	...	S. D. LOXTON, F.R.C.S., M.R.C.O.G.
<i>Ophthalmology</i>	...	...	...	D. SIMPSON, B.SC., M.B., CH.B.
<i>Orthopaedics</i>	...	...	...	D. M. JONES, M.CH. (ORTH.) F.R.C.S.
<i>Radiology</i>	...	...	...	J. V. SPARKS, B.A., M.R.C.P., D.M.R.E.
<i>Pathology</i>	...	...	...	A. L. TAYLOR, M.D.
„	...	...	...	D. WOODMAN, M.D.
<i>Anaesthetics</i>	...	...	...	L. P. FITZGIBBON, M.B., B.S.
„	...	...	...	P. L. F. MORTIMER, M.B., B.S., D.A.
<i>Dentistry</i>	...	...	...	E. L. TRUSSELL, L.D.S.

Honorary Consultants.

<i>Neurology</i>	...	...	...	F. L. GOLLA, M.A., F.R.C.P.
<i>Psychology</i>	...	...	...	E. L. HUTTON, M.B., B.S., D.P.M.
„	...	...	...	G. C. DREW, M.A., Professor of Psychology University of Bristol.
<i>Electro-Physiology</i>	...	...	...	W. GREY WALTER, M.A., D.SC.
<i>Physics</i>	...	...	...	Prof. C. F. POWELL, D.SC., F.R.S.
„	...	...	...	D. F. GIBB, B.SC.
<i>Research Apparatus</i>	...	...	...	J. H. BURROUGHS, B.SC.

<i>Group Secretary</i>	...	...	...	J. L. DAVIS, F.C.I.S., A.H.A.
<i>Finance Officer</i>	...	...	...	A. BRADLEY, F.I.M.T.A., A.H.A.
<i>Matron</i>	...	...	...	Miss M. T. LYONS, S.R.N., S.C.M., R.M.N.
<i>Chief Male Nurse</i>	...	...	...	A. H. BALDWIN, R.M.N., R.M.P.A.
<i>Group Engineer</i>	...	...	...	H. A. ADAMS, M.I.MAR.E.
<i>Head Gardener</i>	...	...	...	G. W. COATES (Fishponds).
<i>Farm Bailiff</i>	...	...	...	F. S. SMITH (Barrow).
<i>Chief Pharmacist</i>	...	...	...	E. F. WELLINGTON, B.PHARM., PH.C.
<i>Dispenser</i>	...	...	...	Miss M. BERNARD (Fishponds).
<i>Church of England Chaplains</i>	...	...	...	Canon A. C. HUTCHINSON (Fishponds). Rev. C. E. GARRAD (Barrow).
<i>Roman Catholic Chaplains</i>	...	...	...	Rev. Father A. BARRY (Fishponds). Rev. Father T. J. HUGHES (Barrow).
<i>Nonconformist Chaplain</i>	...	...	...	Rev. V. N. VOICE (Fishponds).

Social Workers.

Mrs. GRANT	Mrs. CORDON
Miss GILLFORD	Mrs. BEEDELL
Miss GRASSBY.	

Medical Librarian.

Mrs. MARKEY.

Occupational Therapists.

Mr. H. HARRISON, M.A.O.T., R.M.N., N.S.A.M.	} (Fishponds)
Mrs. E. C. GIBBONS, M.A.O.T.	
Mrs. M. PACKHAM, M.A.O.T. (Grove Road).	
Mr. A. BEASLEY, M.A.O.T., R.M.N.	} (Barrow).
Mr. G. H. SHANNON, M.A.O.T.	
Miss B. L. JACOBS, M.A.O.T.	
Miss J. M. H. BARNES, M.A.O.T.	

June, 1952.

To the Chairman and Members of the Management Committee of the Bristol Mental Hospitals Group.

MR. CHAIRMAN, LADIES AND GENTLEMEN,

I have the honour to present a report on the medical work of the Bristol Mental Hospitals Group for the years 1948 to 1951 inclusive.

The Bristol Mental Hospitals group comprises the following hospital units :—

Barrow Hospital (for acute, neurosis, and research).

Dundry Villas (neurosis unit at Barrow Hospital).

Day Hospital, 12 Grove Road, Redland, Bristol.

(with clinics and limited in-patient accommodation).

Fishponds Hospital (for chronic, elderly, physically sick).

Beds in use at these hospitals are :—

			<i>Male</i>	<i>Female</i>	<i>Total</i>
Barrow	...	...	121	178	299
Dundry Villas	...	...	40	40	80
Day Hospital	...	...	—	12	12
Fishponds	...	...	497	688	1,185
			—	—	—
Total	...	...	658	918	1,576
			—	—	—

In spite of shortage of staff and materials, and increasing financial stringency, much progress has been made during the period 1948–51. Barrow Hospital has been fully re-opened ; a Neurosis Unit and a Day Hospital have been established ; departments of Biochemical and Endocrinological Research, of Electroencephalography, of Experimental and Clinical Psychology, and of Social Work have been developed ; and post-graduate teaching is at last on a sure footing.

ADMISSION AND DISCHARGE RATES

The number of patients admitted and discharged reached a high level with the opening of the Neurosis Unit in 1951; the peak does not seem to have been reached yet.

TABLE I.

ADMISSIONS AND DISCHARGES

	ADMISSIONS				DISCHARGES		
	TOTAL	Male	Female	% Vol.	TOTAL	Male	Female
FISHPONDS—							
1948 ...	382	149	233	60	296	107	189
1949 ...	330	135	195	55	186	76	110
1950 ...	270	101	169	57	204	74	130
1951 ...	317	103	214	41	227	81	146
BARROW—							
1948 ...	750	324	426	87	544	248	296
1949 ...	895	405	490	89	815	383	432
1950 ...	750	306	444	94	750	322	428
1951 ...	730	285	445	86	727	278	449
DUNDRY—							
1951 ... (9 months)	338	141	197		285	117	168

TOTALS FOR THE GROUP—

	ADMISSIONS	DISCHARGES
1948 ...	1,132	840
1949 ...	1,225	1,001
1950 ...	1,020	954
1951 ...	1,385	1,239

GENERAL HEALTH

The general health of patients and staff has been reasonably good. There was an epidemic of Sonne dysentery at Fishponds in 1951, with 73 cases (including 3 staff); there were no deaths.

A survey of patients' ages at Fishponds in 1949 gave the following results :—

<i>Age Group</i>	<i>Males</i>	<i>Females</i>	<i>TOTAL</i>	<i>Percentage</i>
Under 30 ...	41	24	65	5.5
31 to 64 ...	335	420	755	63.6
65 and over...	110	257	367	30.9

As many of the older patients are bedridden or unable to wash and dress themselves, and most of the younger able-bodied patients are treated at Barrow, the task of ward staff at Fishponds is heavy, with much less assistance from patients in domestic work than formerly.

There have been an unprecedented number of fractures, mostly at Fishponds, and nearly all occurring in elderly patients.

1948	...	28
1949	...	27
1950	...	39
1951	...	38

This reflects age, overcrowding, and insufficient nurses at Fishponds.

The incidence of pulmonary tuberculosis is still high, and there are at present 25 active and 18 quiescent male cases, and 9 active and 5 quiescent female cases at Fishponds. The Male Infirmary Ward has been converted into a TB isolation ward for 50 male patients and has been suitably equipped. On the female side a verandah ward has been modified for 15 cases. These arrangements will probably serve requirements at Fishponds until the plans of the Regional Hospital Board for the care of mental patients in the northern region who are suffering from TB have been developed.

All patients and staff are X-rayed annually on miniature films, and there is a large-film check-up more frequently for staff in TB wards. Preventive measures, including BCG inoculation for nurses, have been introduced.

The numbers of surgical operations performed were :—

		<i>Leucotomies</i>	<i>Other Operations</i>
1948	...	13	17
1949	...	10	8
1950	...	32	17
1951	...	29	22

Insulin Treatment.

The insulin treatment unit was transferred from Fishponds to Barrow in 1948. The numbers treated were :—

		<i>Male</i>	<i>Female</i>	<i>TOTAL</i>
1948	...	31	26	57
1949	...	27	25	52
1950	...	20	25	45
1951	...	24	28	52

Clinical Pathology and Bacteriology.

In 1949, the Regional Hospital Board set up its pathological services, under which hospital laboratories were grouped. Under this scheme, the pathological laboratory at Fishponds was taken over as part of the group supervised by Dr. Woodman, and that at Barrow as part of the group directed by Dr. Taylor. The re-arrangement has worked smoothly and efficiently.

MEDICAL STAFF

The senior medical establishment is now complete. The senior staffs at Barrow and Fishponds are virtually distinct. The registrars and juniors interchange in order to gain experience.

NEUROSIS CENTRE

The neurosis centre at Barrow was opened 1st April 1951. It consists of two villas, with accommodation for 40 patients of each sex, and is named Dundry Villas. The unit caters for early forms of most mental and neurotic illnesses in which the prognosis is considered to be good, provided the patients are co-operative. Cases suitable for admission include :—

1. Psychoneurosis of any type with fair prognosis, and psychosomatic disorders without serious physical illness.
2. Mild or early psychosis, without much disturbance of behaviour, *e.g.* depression, schizophrenia.
3. Cases for special investigations, *e.g.* electroencephalography, hormone studies.
4. Certain cases of neurological disorder for psychiatric assessment.

Cases unsuitable for admission include :—

1. Chronic neurosis cases that have already had adequate courses of treatment.
2. Acute and chronic psychosis with delusions or behaviour disturbances.
3. Severe psychopaths and Court cases.
4. Cases with active TB or other infectious cases, and those physically ill who require much nursing.

The neurosis centre is administered by one physician (Dr. Gibb), but all physicians on the staff treat their own patients there. Patients are accepted on the recommendation of a consultant from any part of the region, but so far the majority have been admitted after consultation at our own out-patient clinics.

Shortly after being opened, all the beds in the female villa were filled and a waiting list established. There has been a good turnover of patients and the unit is proving successful. There is still some difficulty in staffing the female villa satisfactorily, and occupational therapy is not adequate.

DAY HOSPITAL — 12 GROVE ROAD

The Day Hospital system has been tried with success in a small number of centres in this country and elsewhere. The original conception was to relieve overcrowding by accepting patients for treatment and supervision by day, returning them to their relatives

for the night. Experience has shown that this method may have real advantages for certain types of illness, as it makes less of an interruption in social life than hospitalisation.

After a preliminary trial at Barrow, transport was found to be inconvenient, and No. 12 Grove Road was adapted and equipped as a complete Day Hospital. The building, which was repaired and redecorated recently, has a number of small rooms and is excellent for the purpose. Patients attend from 9 a.m. to 4 p.m. and are provided with a meal. They receive the treatment appropriate to their illness, as if they were in-patients, and an occupational therapist attends daily. Patients are accepted only after preliminary consultation at our out-patient clinics, or after an initial period of in-patient treatment at Barrow or Dundry Villas.

The unit is administered by a consultant psychiatric physician (Dr. Smith). A registrar attends each day, and other physicians conduct their own treatment sessions. There are two qualified nurses, with part-time assistants. The in-patients help with domestic work.

In conjunction with the Neurosis Centre at Dundry Villas, the Day Hospital at Grove Road marks an important step in psychiatric practice. It should provide much information about the nature of psychoneurotic illness and the factors operative in its cure. The number of day patients is about 30, and if, as is hoped, they can be discharged after a month's treatment, the unit will be economical in staff for the annual admission rate of about 360.

At Grove Road there are also held follow-up clinics and psychotherapy sessions, and out-patient electro-convulsive therapy is given.

OUT-PATIENT CLINICS

The main diagnostic out-patient clinics are held at the Bristol Royal Infirmary and at Southmead Hospital.

There are special clinics at Grove Road, linked with the work of the Day Hospital, and these provide sessions devoted to psychotherapy, electro-convulsive therapy, and after-care.

In all, 22 out-patient sessions of different kinds are held weekly.

Out-patients referred from our own clinics and from other consultants attend at Barrow Hospital for special investigations, such as electroencephalography, psychological assessment, and thyroid study by radio-active iodine.

Cases referred from the Courts are seen at Barrow and at Fishponds by appointment.

Dr. Early visits the observation wards at Stapleton Hospital twice weekly.

Numbers of out-patient attendances are shown in *Table II*.

TABLE II.

OUT-PATIENTS ATTENDANCES

		Diagnostic clinics			Investigation, treatment, after-care			
		TOTALS	B.R.I.	South-mead	TOTALS	Barrow	Fish-ponds	Grove Road
NEW PATIENTS—								
1948	...	751	751	—	202			
1949	...	905	905	—	749			
1950	...	898	898	—	723	701	22	—
1951	...	1,120	862	258	884	821	—	63
TOTAL ATTENDANCES—								
1948	...	3,478	3,478	—	985			
1949	...	4,168	4,168	—	1,980			
1950	...	4,648	4,648	—	1,773	1,009	356	408
1951	...	4,174	3,477	697	3,674	1,040	85	2,549

TOTALS FOR THE GROUP—

				New patients	Total attendances
1948	...	...	...	953	4,463
1949	...	...	...	1,654	6,148
1950	...	...	...	1,621	6,421
1951	...	...	...	2,004	7,848

GENERAL CLINICAL RESEARCH

Most of the clinical research work is combined with the work of the special departments, but in addition some independent work is under way. Clinical trials of drugs such as Vegolysin and Priscol have been made and their properties and applications examined. In 1950/51 Dr. Hare investigated patients' attitude to hospital treatment. From a personal survey of about 250 cases he tried to ascertain factors in hospital life which seemed to help or retard recovery and socialisation, and looked for causes of relapse after apparent recovery.

DEPARTMENT OF ELECTROENCEPHALOGRAPHY AND ELECTROPHYSIOLOGY

The Department was opened at Barrow in March 1948, with Dr. Thomas in charge, and an electronic engineer and 2 recordists were appointed later. In January 1950, Dr. Thomas was appointed Associate Professor of Neurophysiology at Washington University, U.S.A. and Dr. Turton (now Consultant Physician in electroencephalography) became head of the department, with Dr. Gibb as assistant later. The department opened with one Ediswan 6-channel machine, then an Ediswan Mark I Wave Analyser was added, and later a Mitchell 6-channel apparatus, a stroboscope and

two further lamps. In 1950 a Mark II Wave Analyser was installed, and in 1951 an Ediswan 8-channel machine. The electronic workshop was equipped in 1951, and a considerable constructional and maintenance programme is in hand. This includes the building of a portable machine of special design. An electronic trigger mechanism has been designed and built by the electronic engineer (Mr. Hewlett), and much work has been done on its use in clinical practice.

The bulk of the work of the department consists of taking electroencephalographic records of patients referred by the staff of the Bristol Mental Hospitals and by consultants from the clinical area and elsewhere. The type of patient varies widely in clinical diagnosis and in age (from 5 months to 85 years), and includes a high proportion of epileptics and possible epileptics, organic brain conditions, behaviour disorders in children and adults, and psychiatric illnesses. The number of patients examined is about 40 a week and is still increasing. About half of these are in-patients at Barrow, as most admissions are referred as a matter of routine. Other electrophysiological tests, predominantly electrocardiograms and electromyograms, are also performed.

DEPARTMENT OF EXPERIMENTAL AND CLINICAL PSYCHOLOGY

The Department was started in January 1948, with the appointment of Mr. and Mrs. Morrisby. Later in the year, when they left Bristol, the work lapsed except for routine testing carried out by Miss Attlee.

The department was re-formed in 1949, with Dr. Hall as Senior Psychologist and two assistant psychologists (Mrs. Hall and Mr. Crookes). In October 1951 Mr. Earle replaced Mrs. Hall, who resigned.

The work of the department consists of applying and developing methods of mental testing in clinical practice, conducting experimental research, and teaching post-graduate psychiatry students and undergraduates in non-medical faculties. By arrangement with Professor Drew, Department of Psychology, University of Bristol, students attend for clinical experience and to work on particular problems.

When the department was re-formed in 1949, the first task was to obtain test materials and to organize an adequate mental testing routine in the hospital. Standard intelligence tests such as the Wechsler, Raven Matrices, Vocational Aptitude tests, and the usual projective techniques such as the T.A.T. and Rorschach, are all in current use, together with special tests of memory loss, conceptual impairment, and learning efficiency. The number of patients tested

by the department has increased and now averages 25 a week including out-patients.

Mental test research is being carried out on problems of conceptual impairment in schizophrenia and in the presenile psychoses, and on personality factors in involutional depression and obsessional neurosis. It is planned to organize the ordinary testing more towards research on specific diagnostic testing problems, so as to make full use of the wide range of clinical material available. Other research carried out within the department by students from the University consists of a study on verbal organization in schizophrenia, and a thesis—not yet completed—on “The significance of colour shock on the Rorschach.”

The most recent development is applied experimental work. Two studies on learning impairment have recently been completed, (a) in schizophrenic and organic patients and (b) in psychoneurotics, and a contribution on the subject was made at the International Congress of Psychiatry in Paris, 1950. Apparatus used in this research was devised and constructed in the department.

Other work in progress is an experimental study of fatigue and of pain tolerance in various groups of depression and psychoneurosis; the influence of leucotomy on pain and fatigue thresholds; tachistoscopic studies of personality factors in perception; and the investigation of emotional changes under various experimental conditions. This side of the department's work is likely to increase considerably, as two laboratories are now available for research and equipped with basic items of apparatus. Research on various problems is correlated with the work of the Department of Biochemical and Endocrinological Research.

DEPARTMENT OF BIOCHEMICAL AND ENDOCRINOLOGICAL RESEARCH

This department, under the direction of Dr. Reiss, has undergone considerable expansion and development since 1948. Various buildings and huts erected by the Royal Navy during their war-time occupation of Barrow have been converted to laboratories and were in use by the end of 1950.

The department comprises the following laboratories, in addition to offices and stores :—

Fishponds.

- Animal house.
- Physiological laboratory.
- Biochemical laboratory.
- Somatotype laboratory.

Barrow.

Laboratory for investigation of steroid hormone excretions.

Laboratory for protein hormone chemistry and development of investigation methods in body fluids.

Special section for clinical use of radio-active isotopes.

Unit for metabolic measurements, with patients' balance.

In December 1951, the ketosteroid laboratory at Barrow was destroyed by fire, the result of the bursting of a benzene container. Much damage was done and some records were lost, but fortunately there were no casualties and all the special apparatus and precision balances were rescued. Temporary arrangements have been made to minimise the interruption in research work, and some of the more academic lines have had to be dropped temporarily so that the ketosteroid estimations could be done in other laboratories. A replacement ketosteroid laboratory will be erected in a more convenient situation, close to the hormone laboratories. Large-scale distillations with inflammable solvents will always be conducted in separate buildings away from the main units.

The direction of this part of research has been, as before, to seek to define the endocrine and other pathophysiological components of mental illness, of mental functioning, and of emotion; to direct treatment on the basis of pathophysiological analysis; to pursue research in the properties of hormones and steroids; and to develop better and more precise methods of laboratory and clinical investigation.

Radio-active tracer technique has been developed in the period under review. A refined and reliable method for estimating thyroid activity, using small doses of radio-active iodine, has been evolved, and with it studies of the thyroid have been made on over 2,000 patients, as well as on normals and animals. Many improvements in recording technique have been devised, apparatus has been constructed in our laboratories, a special ring counter has been designed by Dr. Haigh (Chief Physicist). The radio-active iodine method has now passed into clinical use and the thyroid state of the majority of patients admitted is investigated in this way. The results often point the way to further analysis or to appropriate thyroid or anti-thyroid treatment. Some light has been thrown on problems of the thyroid in anxiety, as well as in other disorders. A certain amount of experimental work on animals with other isotopes (radio-active sodium and phosphorus) is under way.

Tests for adrenal function have been adopted and modified, and also have passed into clinical use. These tests, combined with other methods of analysis, are providing information about the physiological mechanism of shock therapies and throwing some light on periodic mental disorders.

Anterior pituitary hormones have been prepared and standardised in the department, and are used in the treatment of patients on the basis of hormone analysis.

Adrenocorticotrophic hormone (ACTH) was not easily available in England after the war. Production was started in the Bristol Mental Hospitals laboratories from pigs' pituitaries, and methods of standardisation have been published. In 1950/51, it was possible to distribute some of this ACTH to other hospitals and research workers in Bristol and elsewhere, for clinical trial. 25 gms. of this Z.3 preparation were supplied to the Biological Standards Department of the Medical Research Council in May 1950 to assist in establishing the International Standard. The preparation was successful and Z.3 is being retained provisionally as the British Standard. As the result of new production, ACTH is now supplied to the hospital for therapeutic purposes, and that produced in our own laboratories is now used only for special scientific purposes and response testing, as distinct from treatment. In connection with the ACTH situation and the present supply of pituitaries, the Department has had valuable assistance from Messrs. Organon Laboratories Ltd., who have also furnished research grants to research workers to enable them to study and do research in the field of endocrine chemistry and physiology.

Investigation of steroid metabolism and the excretion of steroid hormones is a large part of the total research effort. Measurements of total and fractional ketosteroids have become part of the clinical routine, and, with the other investigations mentioned, allow a more complete picture of physiological interconnections in psychiatric illness to be obtained than has hitherto been possible.

To pursue these investigations, especially in schizophrenia, a well-trained nursing staff is essential, even with co-operative patients. There have been many disappointments due to incomplete urine collections and to lack of proper supervision and control of the conditions in which patients are nursed.

It is practically impossible, in this kind of research, to be sure of the degree of severity and duration of illnesses, and how much these factors signify. Correlations between laboratory findings and symptoms must be made with great caution. There is also so much variation between patients suffering from apparently the same disorder that the results of small groups of patients are practically useless for statistical evaluation. The research unit of a few beds, though ideal from the point of view of nursing management and supervision, is therefore totally unsatisfactory. At Barrow, 12 male and 14 female beds are set aside for research cases of neurosis and psychosis.

A certain proportion of research is devoted to more academic problems, such as brain chemistry; the properties of hormones,

their preparation and standardisation ; cholinesterase levels in blood and body fluids ; devising new analytic methods such as the fraction cutter for chromatographic analysis, and methods for freeze-drying preparations ; and studies of circulation time, brain circulation, and capillary formation.

The separation of the laboratories between Barrow and Fishponds and the lack of an animal house at Barrow make the work inconvenient ; this is inevitable until some new buildings can be erected at Barrow.

Looking back over the work of 4 years, it can be claimed that an enormous amount of effort has been expended. Some lines have not proved as useful as was hoped, but some real progress appears to have been made in defining the physiology of mental states and in adapting modern methods for their elucidation. While a dramatic series of therapeutic results cannot be claimed nor expected, it should not be forgotten that by comparison with insulin and E.C.T. the effective dosage of hormones so far used is physiologically very small. It may be that in order to avoid some of the disagreeable results of shock treatments, hormone therapy—less violent—may have to be conducted over a much longer period than is at present usual. There is a tendency to accept for research and applied hormone treatment chiefly patients in whom the prognosis with any other form of treatment is known to be bad. Important though these cases are from the point of view of contributing knowledge, they should not be regarded as material on which to base an argument for or against the value of hormone therapy applied as the result of hormone analysis.

Our experience over the last few years has shown that there are many conditions in which an endocrine deviation susceptible to correction may be an important if not a primary factor in causation. Interesting results of adrenal cortex studies have been found in cases of periodic depression and especially in some who failed to respond to E.C.T. Unexpected or paradoxical disturbances of the thyroid have been observed, and there are schizophrenic patients who appear to be resistant to thyroid hormone or resistant to anti-thyroid drugs.

Therapeutic trial is handicapped by the difficulty of establishing criteria for improvement as well as for the severity of the illness ; but the study of physiological changes during spontaneous remissions has reinforced the view that many psychiatric reactions should be susceptible to a rational hormone therapy, based on frequent and precise hormone analysis.

Research in neurophysiology and neuro-endocrinology of animals is vastly more simple than research in the same aspects of mental disorder. It has yet to be shown convincingly that even the artificial neuroses that can be produced in animals have the same

significance or dynamics as those of human beings, and there is no parallel in the animal world for schizophrenia or the manic-depressive psychosis. Thus the research institute that relies on animals will contribute much to academic phenomenology but may even mislead when the results are translated into terms of clinical practice with humans.

Visits to important centres in Europe, the U.S.A. and Canada, have reinforced the view that research in psychiatry is likely to be sterile, however elaborate and well-conceived the laboratories may be, unless closely integrated with a rich clinical material that can be properly evaluated from the psychiatric point of view, checked and re-checked, and compared with suitable samples from the same social and racial population. Our experience indicates that every refinement in laboratory measurement should be accompanied by refinements in assessment of the meaning of human behaviour and of dynamics in the psychological sphere. The realisation of objectives of a balanced research institute is extremely difficult, for unless the clinical material is both rich and numerous, the exceptions to rules will be too high for statistical evaluation of the positive findings.

In planning our work we endeavour (with certain obvious exceptions, such as cases of organic dementia or gross mental defect) to apply certain standard investigations, such as for thyroid function, to most of the cases admitted, and to investigate as well comparable cases on an out-patient basis, thus allowing for the influence of the hospital environment. Many of these investigations give negative or normal results. These in themselves are useful, and against these negative or normal results in cases of actual mental illness are to be sought other modalities of normality and abnormality.

The experimental psychologist has been able to bring more precision into methods of assessment, especially in the very young and in the older age groups ; and the integration of the work of the department of electroencephalography—as well as experimental psychology—with that of endocrine and biochemical research, is doing much to define and control the clinical material under investigation.

Research is becoming increasingly expensive. Hormone preparations and modern drugs themselves are coming under heavy criticism for their comparatively high expense and prodigal use. We are convinced, however, that even more could be wisely spent in developing and devising methods for physiological evaluation of the mentally-sick. For it must be admitted that in the aetiology of psychotic illness practically no progress has been made in the last hundred years. It is instructive to study old reports of the Bristol Mental Hospital of nearly a century ago. Patients admitted under certificate at this time suffered from severe psychotic illnesses,

and the kind of recoverable voluntary patients and neurotic cases that we see in numbers today never reached the old asylum. Yet these old reports show that more than one-third, and in some cases over one-half, of patients admitted were discharged as recovered in the course of a year. No doubt spontaneous remission, the cure of alcoholism, and correction of dietary deficiencies, contributed a lot ; but it gives food for thought to read that a vegetable drug resulted in the cure of cases of G.P.I. Probably these very cases cured by the vegetable drug and discharged without relapse were in reality what we should now call mania, a distinction almost impossible to make at that period, for want of laboratory tests.

It does not appear to us very likely that the studies we should like to make in psychosomatic medicine can be planned and carried out without the possibility of altering the environment experimentally to a great extent. To be able to show that with a particular kind of constitution, under particular conditions, a psychosomatic disorder becomes irreversible, would be of great importance, for it would enable the clinical material to be separated into favourable and unfavourable, with great economy of the therapists' time. Studies of this kind would have to be extended among the family and siblings, and this is a project which should be within the scope of one large research institute, given adequate work and laboratory space. Physiological abnormalities observed in schizophrenia, in manic-depressive psychosis, or in the neuroses, may be exaggerations of deviations from the normal, present in members of the same family. This is a problem which would well repay investigation, and the concept is not unduly extravagant.

If some of these questions were answered, they would be answered once and for all, and the particular kind of research would not need to be extended or repeated elsewhere.

The tendency of psychiatric research institutes is to develop laboratories and equipment without due regard to the clinical resources. Then, because there is either insufficient clinical material or poor co-operation between clinicians and laboratory workers, the laboratories pursue neurophysiological research which becomes increasingly divorced from the original purpose of the institute.

We have tried to offset this by arranging a full programme in the laboratories. The patients selected for investigation usually exceed capacity. Thus there is always urgency. To keep the problems alive and to stimulate active interest in medical and non-medical workers, there are frequent case conferences, and all but the most junior technicians attend special demonstrations of clinical cases and treatment.

It is important that the concept of research should never be separated from the basic idea that it owes its existence to the desire to cure mental illness.

TEACHING

The special departments, as well as clinical work at Barrow and Fishponds, are available for postgraduate teaching. Registrars and juniors are appointed expressly for training with the object of preparing them for the Bristol Diploma in Psychological Medicine. Initially they are based on Barrow Hospital, and attend other departments, such as Child Guidance, Neurology, and Mental Deficiency, for further experience. Postgraduate demonstrations and lectures are arranged in connection with other non-medical University courses. Students from the Department of Psychology at the University attend the Department of Applied and Experimental Psychology at Barrow, for special experience and research. Some postgraduate students in science and chemistry work under grants in the Department of Biochemical and Endocrinological Research, preparing for higher qualifications. There is much co-operation and consultation with other University departments, both in and outside the Faculty of Medicine.

VISITORS

Foreign workers and specialists have visited the hospital for various periods of time, and in 1951 four physicians from Spain came here to study applications of radio-active isotopes preparatory to setting up their own department in the University of Barcelona.

Clinical meetings with case presentations are held weekly at Barrow and Fishponds.

The Society for Endocrinology held a meeting at Barrow in 1950.

CONGRESSES AND LECTURE TOURS

The Hospital has been represented and members of the staff have presented papers at the following :—

- 1948 : International Congress of Physiology (Oxford).
Society of Experimental Biology.
Society of Biochemistry. Society of Endocrinology.
Royal Society of Medicine.
- 1949 : International Congress of Biochemistry (Cambridge).
International Congress of Electroencephalography (Paris).
Pharmacological Congress (Bristol).
Society of Biochemistry. Society of Endocrinology.
Royal Society of Medicine.
- 1950 : International Congress of Psychiatry (Paris).
International Congress of Physiology (Copenhagen).
Symposium of the British Institute of Radiology.
Conference of the British Empire Cancer Campaign.
Symposium of the Society of Public Analysts.
Society of Biochemistry. Society of Endocrinology.
Royal Society of Medicine, Experimental Psychology Group.
British Psychological Society.

1951 : Conference of the French Society of Endocrinology (Paris).
Conference of the CIBA Foundation (London).
Conference of German Society for Psychiatry and Neurology
(Stuttgart).
Royal Medico-Psychological Association.
Society of Biochemistry. Society of Endocrinology.
Experimental Psychology Group, Reading University.
Committee of Professional Psychologists (London).
Research Colloquium, Institute of Education, University of
Bristol.
Philosophical Society, University of Bristol.
Research Colloquium, University of Reading.
International Congress of Mental Health, Mexico City.

In 1950 and 1951, special lectures on psychiatric and research subjects were given in Zurich, Bordeaux, Barcelona, New York, Cleveland, Yerkes Institute (U.S.A.), and Montreal.

MEDICAL LIBRARY

The Medical Library at Barrow Hospital is available for members of the medical staff, special departments, and visitors introduced by the staff. It is in charge of a librarian, who receives assistance and co-operation from the Librarians of the University of Bristol, of Bristol Corporation Central Library, and of the American Embassy in London.

There are now 530 text-books on medical and scientific subjects, and 83 journals on such subjects are subscribed to. During 1951, over 400 books and journals were obtained on loan from other libraries.

NURSING STAFF

The number of male nurses in training and qualified is satisfactory, and Fishponds and Barrow are adequately staffed on the male side. A preliminary training school for nurses has been established at Barrow and at Fishponds, with male and female nursing tutors. The medical staff and psychologists assist in lecturing, and the opportunities for preliminary training study are believed to be exceptionally good. Nevertheless, English-speaking female student nurses are so few that the bulk of students now are foreign. An attempt has been made to secure recognition for the English Certificate in Mental Nursing from the French Ministry of Health, and discussions are still continuing, with some prospect of success. French psychiatrists have visited Barrow Hospital and have supported the plan.

French girls are engaged as ward orderlies initially. English teaching is provided with the help of the Education authorities of Bristol and Somerset. As soon as they become sufficiently proficient in English, they are encouraged to transfer to student nurse grade

and proceed to the Certificate. A certificate of satisfactory service is given by the Hospital to French ward orderlies who have done at least six months and have shown interest and enterprise.

It must be admitted that these arrangements are only a stop-gap. The problem of training and keeping qualified staff, and especially supplying nursing officers, is going to be serious in the next few years. There is a very natural tendency for nurses who have obtained the Certificate in Mental Nursing to transfer to general nursing and obtain the additional qualification. The majority of these doubly-trained nurses do not, as formerly, return to mental hospital work, as there is no longer any considerable advantage.

TABLE III.
NURSING STAFF
At 31/12/51.

	BARROW & DUNDY		FISHPONDS	
	Male	Female	Male	Female
Officers	3	3	6	3
Charge Nurses ...	10	5	18	11
Staff Nurses ...	11	5	36	8
Students	8	4	14	11
Orderlies	4	30	8	54
	36	47	82	87

JOINT STAFF CONSULTATIVE COMMITTEES

In 1950 Joint Staff Consultative Committees were set up at Barrow and at Fishponds. On the Management side, some members serve on both Committees, with the object of achieving uniformity of purpose between the two Joint Committees.

DEPARTMENT OF SOCIAL WORK

The three qualified psychiatric social workers who were members of the staff in the early part of the period under review have left for one reason or another. In common with most mental hospitals, it has been found impossible to obtain qualified psychiatric social workers, and the department at Barrow has been re-organized under one of the physicians, with three social workers, experienced in various branches of social work, but without the Mental Health Certificate. The total staff is therefore five for the two hospitals ; all of these have had experience and training in the Bristol Mental Hospitals group. The arrangement is working satisfactorily. With the high admission rate and large out-patient turnover, more social workers are necessary and it is hoped to accept students in the department in the course of time.

OCCUPATIONAL THERAPY

At Fishponds the occupational therapy departments for males and females are separate, and there are two occupational therapists. At Barrow the departments have been combined, and there are four occupational therapists, with an unpaid student. Ex-Naval Nissen huts have been fitted for occupational therapy, and, while these provide sufficient space, problems of heating and their general condition restrict their use. Classes are also held in the wards. With the development of the Neurosis Centre, there is a need for more staff. Patients also work in the flower gardens, on the farm, and in other hospital departments, as part of their occupation and recreation, distinct from occupational therapy.

ART THERAPY

Considerable importance is attached to the value of creative work, both as a form of treatment and as an indication of the changes in unconscious mental activity.

Art classes have been organized on the male and female sides, and patients are encouraged to draw or paint freely, with no interference from their teacher beyond help in technical expression. Serial studies have been made of cases undergoing insulin treatment, in delirium, mania and depression, and in puerperal conditions. In these paintings art forms such as colour and movement are correlated with changes in the clinical course of the illness.

Patients show surprising interest in this form of work, and much valuable information has already been obtained. The nursing staff have co-operated with enthusiasm, and the project has made a satisfactory advance in 1951.

ENTERTAINMENTS AND AMENITIES

New sound-film twin projectors were installed at Barrow and at Fishponds in November 1948, and cinema programmes are presented weekly.

During the winter months concerts, plays, and pantomimes are arranged. Grand pianos have been purchased for the concert halls at Barrow and at Fishponds. The Council for Music in Hospitals, and other bodies and private individuals, have arranged concerts, recitals, and lectures with gramophone records.

Dances and other social activities are held regularly, and some of these are organized by the patients themselves.

Patients and staff join in the usual sports—tennis, cricket, football, etc.

HOSPITAL SHOPS

The Hospital Shop at Fishponds has been moved to a more convenient room. Its scope has been very much extended, and it is run by a manager with an assistant.

There is a small shop at Barrow, run part-time by a Stores assistant.

CATERING

A Catering Officer for the group was first appointed in March 1950. New catering equipment installed during 1950 and 1951 at Fishponds included two boiling pans to replace obsolete tea-making equipment, an 80-quart mixing machine, a deep-fat fryer, and a pie machine.

Electrically-heated food trolleys now serve all the ground floor dining rooms at Fishponds, and service lifts to convey food trolleys to the first floor are now under construction.

Bread for the group is all made in the Fishponds bakery, and all cakes are now home-made.

LAUNDRY

The Fishponds laundry serves the whole group, about 23,000 pieces being handled each week. Two washing machines and a press were added in 1950, and other machinery was brought from the small laundry at Barrow which had not been used since the war. A continuous-drying cabinet was purchased from the Bristol Corporation to replace the old-fashioned drying cabinets. A Male Laundry Superintendent was appointed in July 1951.

TRANSPORT

The transport services of the group are based at Fishponds under the control of the Group Engineer, who is also responsible for maintenance of vehicles. Two motor lorries and two passenger vehicles, with a reconditioned single-deck bus as reserve, maintain a time-table service between the hospitals and convey staff to Barrow Hospital from Bristol. A small van is used for transport between the laboratories. Electric goods vans transport stores within the hospital estates.

Hospital transport is used for patients' outings, and on special occasions to convey staff to and from the hospitals outside normal hours.

PLANT AND BUILDINGS — REPAIRS AND IMPROVEMENTS **Fishponds Hospital.**

The electrical rewiring of the whole hospital was completed in 1950. The new cold water services installation was completed by December 1951, except for fitting seven mixing valves and lagging the pipes under the storage tank. We were advised to double the water storage capacity by erecting another 20,000-gallon tank to ensure an adequate supply in case of a failure of the incoming mains. The original scheme provided for 40,000 gallons storage capacity, but this had to be reduced because of steel shortage.

During the last two years good progress has been made with interior and exterior redecoration. The bakery has been re-painted

and fitted with a steel floor, and structural alterations in the food store permit better hygiene. Along the main corridor part of the old flagstone paving has been taken up and replaced by terrazzo ; the remainder will be dealt with next year. Impervious flooring was laid in the bathroom of Wards 13 and 17. The Pathological Laboratory was refitted and redecorated in 1951.

The ward which accommodates male TB patients has been completely redecorated and fitted with new toilet and kitchen arrangements, with great improvement in hygiene and comfort. The verandah formerly used for some of these patients is no longer required. Similar work is going on in Female Ward 19, where the verandah for TB cases is to be extended and modern toilet and kitchen fittings installed. The sick bay for female staff has been re-arranged to form a complete unit of four rooms fitted with wash-basins and a bathroom.

A fire which occurred in the servery adjacent to the main kitchen in May 1951 destroyed a cooks' changing-room, and damaged part of the freshly-painted ceiling and the wall-paint and plaster of the large dining-hall.

12 Grove Road.

New domestic hot water and water-heating systems were installed, and the premises re-wired for electricity. Two new gas cookers were fitted. Repairs to the fabric, including the roof, and redecoration throughout have been carried out. The toilet arrangements have been reconstructed, and new floors laid in the passages. A new oak-block floor has been laid in the patients' lounge.

FARMS, GARDENS AND ESTATE

Fishponds.

A herd of large white pedigree pigs is maintained. During 1950/51, 116 pigs were sold for bacon and 25 for breeding, and 5 were consumed in the hospital. The fattening pens were reconstructed in the summer of 1951.

The poultry section produced 26,716 eggs and 523 lbs. of table birds. About 30 acres are devoted to market gardens and orchards. Some of the old fruit trees are replaced every one or two years.

Special attention has been given to improving the parkland and ward gardens. During 1950/51, 5,000 bulbs, 10,700 spring plants, and 8,500 summer plants were bedded. Awards were won at the Bristol Civic Horticultural, the Bath Horticultural, and the Bristol Chrysanthemum Shows. Early in 1949 two sections of the glass-houses were rebuilt.

Kerbing has been placed along a section of the main drive, the road has been re-surfaced, and an island constructed at the cross-roads.

Barrow.

All adult cattle were sold in April 1949 with a view to establishing an attested herd on the nucleus of young pedigree British Friesians reared separately from the dairy herd. Farm buildings were cleaned and improved, and a few new animals bought at "attested" sales. An Attestation Certificate was awarded in July 1949. The herd now consists of 61 cattle, of which 26 have reached the milking stage. Milk production for 1950/51 was 21,515 gallons.

The 142 acres of arable and grassland produce a large proportion of the Hospital's vegetable requirements and the feeding stuffs for the dairy herd.

A greenhouse was erected in 1950 for propagation of plants and flowers for bedding-out and ward decoration, and nursery beds and soft fruit plantations are being developed.

In former years thinnings from the spruce woods have provided Christmas trees for hospitals in the Bristol area. The limit was reached in 1950 and therefore 500 Norwegian spruce of various sizes have been planted.

ACCOMMODATION

There are two great problems : the serious shortage of female nurses, and the aged patients.

Both these problems have such an influence on the distribution of the patients in the group of hospitals that the better accommodation cannot be used efficiently or to full advantage.

Overcrowding in certain wards is due to the necessity of concentrating as many patients as possible in a few wards in order to simplify nursing supervision, and this is the rule with the aged and frail, and chronic psychotics. Logically, the more care and individual attention patients require, the smaller should be the size of the wards ; in fact, the opposite has to be the working rule.

Fishponds is grossly overcrowded. As the majority of patients there are elderly, the lack of facilities for their care and the inadequate sanitary annexes make supervision and nursing extremely difficult. Even the normal maintenance work and decorations are done with the patients in occupation.

Fishponds was constructed on the assumption that there would be patients of all ages and of all stages of mental illness, including convalescent ; thus it is not suitable for a majority of elderly, chronic, or bedridden patients, and some wards are not equipped for such cases. Under these conditions, the overcrowding is relatively more serious than figures alone would suggest.

A survey of the wards at Fishponds Hospital in April 1951 showed that, unless extensive structural alterations and improved sanitary annexes could be provided, the bed complement should be reduced and the wards re-designated, if working conditions were to be satisfactory, as the accompanying tables show.

TABLE IVa (Male)

FISHPONDS HOSPITAL — APRIL, 1951

Male Wards	Beds in 1925	Statutory beds	Beds occupied	Maximum reasonable number	OLD USE	PRESENT USE	OPTIMUM USE
1	26	31	37	28	Open : Convalescent before discharge.	Open : Convalescent and chronic psychotic.	Thoroughfare ward or Convalescent.
2	24	18	24	20	Admission.	Admission.	Admission.
4	110	84	105	80	Open (supervised): Old men and chronic psychotics.	Closed : Senile demented, epileptics, chronics.	Open : Old psychotic.
5	110	95	112	80	Intermediate convalescent.	Closed : Deteriorated chronics, M.Ds. and epileptics.	Closed : Disturbed chronics.
6	20	36	47	30	Open : Ex-Servicemen.	Open : Quiet chronics.	As now.
7	25	22	30	24	Closed: Quiet chronics.	Closed : Difficult psychotics.	As now.
W.W.	44	24	30	24	Open : Workers.	Open : Workers.	As now.
M.Inf.	44	30	58	30	Infirmary and T.B.	Old men and T.B.	T.B. only.
M.C.	44	30	45	30	Sick Convalescent.	Sick.	Sick.
	447	370	488	346			

TABLE IVb (Female)

FISHPONDS HOSPITAL — APRIL, 1951

Female Wards	Beds in 1928	Statutory beds	Beds occu- pied	Maximum reasonable number	OLD USE	PRESENT USE	OPTIMUM
8	26 male	20	30	26	Male Parole.	Open : Chronic psychotic workers.	Male Parole.
9 11	50	40	52	45	Open : Convalescent before discharge.	Semi-open : aged and convalescent.	Open : Convalescent before discharge.
10	26	27	35	25	Closed : Aged frail.	Closed : Overflow of bedridden and frail ambulants.	Admission ward— excited patients.
12	121	90	114	80	Epileptics, difficult psychotics.	Closed : Aged Frail ambulants.	Semi-open : Frail Ambulants.
13	121	102	114	80	Aged Frail Ambulants.	Closed : Epileptics, difficult psychotics.	Closed : Difficult psychotics.
14 15 16	78	80	89	70	Workers.	Open (about to close) : mixed population, chronic patients.	15 : Closed : Sick. 14 : 16 : Workers.
17	32	31	45	30	Admission.	Admission.	Admission.
18	33	42	62	40	Chronic psychotic and M.D.	Closed : Same.	Same.
19	43	41	69	40	Sick and T.B.	Sick, bedridden T.B.	Bedridden ONLY.
20	46	52	75	50	Convalescent intermediate.	Closed : Chr. psychotic, No night observation.	Intermediate Convalescent.
Grove Rd	—	39	39	40	Various.	Old chronic patients.	
	576	564	724	526			

CONCLUSION

This account of the work of the last four years gives some indication of the complex nature of modern psychiatry. As with every branch of science, new knowledge creates fresh problems, and plans rapidly become obsolete. This is particularly true of the mental service, and it must be admitted that very few of the mental hospitals in use can be regarded as ideal for the purpose, and in many of them—including Fishponds—some of the wards are frankly unsuitable.

The shortage of nurses and the increasing age of the patients are altering the equilibrium in psychiatric practice. It is fairly certain that in a few years' time the amount of accommodation required for elderly people will seem excessive by pre-war standards. The shortage of nurses will not easily be corrected, and, with the emphasis now laid on more academic training, the student nurse gives too small a fraction of her working day to the care of patients.

To meet these two difficulties plans should be directed towards increasing out-patient clinics and developing the idea of the Day Hospital or special unit for short-stay patients. It is probable that with an effective psychiatric social service and transport many patients could be discharged from hospital much earlier than they are at present, to continue treatment on an out-patient basis or as day patients. But to secure such results more individual attention is required, and this means a relatively higher proportion of doctors, nurses, and special workers per patient than is now usual.

A successful outcome of research in any one disease group in psychiatry would alter the position enormously. The prevention of recurrences of manic-depressive psychosis, or the early cure of schizophrenia in the young, for example, would alone revolutionise the psychiatric problems. Even if research fails to achieve such results, it is of enormous importance in the life of the hospital, for it is instrumental in raising the standard of medical care and nursing interest, and in creating an atmosphere of activity and hope among patients, who used to feel that in-patient psychiatric treatment often meant inactivity and hopelessness.

In conclusion, I desire to express my appreciation of the support and enthusiasm of my colleagues in the various departments, medical and non-medical, of the Hospitals; and to the Chairman and Members of the Management Committee for their continued very great interest and ready support.

R. E. HEMPHILL.

PUBLICATIONS OF THE BRISTOL MENTAL HOSPITALS

Clinical and Research.

1939—1951

1939

JOURNAL OF MENTAL SCIENCE

Some considerations of the physical factor in delusional states.

R. E. Hemphill. (85 : 119)

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Studies on the psychopathology of compulsive wanderings.

E. Stengel. (18 : 2, 250)

INTERNATIONAL JOURNAL OF PSYCHO-ANALYSIS

On learning a new language.

E. Stengel. (20 : 3, 1)

1940

JOURNAL OF MENTAL SCIENCE (four)

Morgagni's syndrome : a clinical and pathological study.

R. E. Hemphill & E. Stengel. (86 : 362, 341)

Studies in certain pathophysiological and psychological phenomena in convulsion therapy.

R. E. Hemphill. (86 : 364, 799)

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R. E. Hemphill & E. Stengel. (86 : 364, 790)

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JOURNAL OF NEUROLOGY AND PSYCHIATRY

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R. E. Hemphill & E. Stengel. (3 : 3, 251)

IRISH JOURNAL OF MEDICAL SCIENCE

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R. E. Hemphill. (6 : 178, 709)

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JOURNAL OF MENTAL SCIENCE (three)

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R. E. Hemphill & E. Stengel. (87 : 77)

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R. E. Hemphill. (87 : 170)

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R. E. Hemphill & W. Grey Walter. (87 : 256)

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Alzheimer's disease with predominating crossed cerebro-cerebellar hemiatrophy.

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THE LANCET

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R. E. Hemphill. (5 Apr : 446)

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R. E. Hemphill.

(58 : 218, 11)

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R. E. Hemphill.

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R. E. Hemphill.

(88 : 1)

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R. E. Hemphill, L. D. Macleod & M. Reiss.

(88 : 554)

Corticotrophic hormones in the treatment of involutional melancholia with hypopituitarism and pituitary cachexia.

R. E. Hemphill & M. Reiss.

(88 : 559)

THE LANCET

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R. E. Hemphill.

(8 Aug : 152)

1944

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R. E. Hemphill.

(90 : 378, 410)

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R. E. Hemphill, M. Reiss & A. L. Taylor.

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R. E. Hemphill.

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R. E. Hemphill and M. Reiss.

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R. E. Hemphill & H. Heller.

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R. E. Hemphill.

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R. Klein & P. P. Mallie.

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Preliminary tuberculosis survey in a mental hospital.

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G. Garmany.

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Obsessional states in epileptics.

G. Garmany.

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R. E. Hemphill & M. Reiss.

(41 : 17)

Lactogenic hormone and fat metabolism.

M. Reiss.

(40 : 294)

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